

WEST[Help](#)[Logout](#)[Interrupt](#)[Main Menu](#) [Search Form](#) [Posting Counts](#) [Show S Numbers](#) [Edit S Numbers](#) [Preferences](#) [Cases](#)**Search Results -**

Terms	Documents
-----------------------	---------------------------

pastoris with gap	27
-----------------------------------	----

US Patents Full Text Database
US Patents-Abstracts and Specifications Database
USCA SEARCH Database
BRIEF Abstracts Database
Elements and Patents Index

Database: IBM Technical Disclosure Bulletins**Search:**

L2

Refine Search

Recall Text  Clear

Search History**DATE:** Friday, September 12, 2003 [Printable Copy](#) [Create Case](#)

<u>Set Name</u>	<u>Query</u>	<u>Hit Count</u>	<u>Set Name</u>
result set			
DB=USPT,PGPB,JPAB,EPAB,DWPI; PLUR=YES; OP=ADJ			
<u>L2</u>	pastoris with gap	27	<u>L2</u>
<u>L1</u>	pastoris and gap	3138	<u>L1</u>

END OF SEARCH HISTORY

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 1 through 5 of 5 returned.****□ 1. Document ID: US 20030082143 A1**

L4: Entry 1 of 5

File: PGPB

May 1, 2003

PGPUB-DOCUMENT-NUMBER: 20030082143

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030082143 A1

TITLE: Receptor-mediated gene delivery using bacteriophage vectors

PUBLICATION-DATE: May 1, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Larocca, David	Encinitas	CA	US	
Baird, Andrew	London	CA	GB	
Johnson, Wendy	Encinitas		US	

US-CL-CURRENT: 424/93.2; 435/456, 514/44[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RWD](#) | [Drawn Desc](#) | [Image](#)**□ 2. Document ID: US 20030064437 A1**

L4: Entry 2 of 5

File: PGPB

Apr 3, 2003

PGPUB-DOCUMENT-NUMBER: 20030064437

PGPUB-FILING-TYPE: new

DOCUMENT-IDENTIFIER: US 20030064437 A1

TITLE: Expression system for recombinant proteins

PUBLICATION-DATE: April 3, 2003

INVENTOR-INFORMATION:

NAME	CITY	STATE	COUNTRY	RULE-47
Wan, Nick	Auburndale	MA	US	
Hoppe, Henry IV	Acton	MA	US	
Goodrick, Jason C.	San Francisco	CA	US	
Schilling, Bernhard M.	Syracuse	NY	US	

US-CL-CURRENT: 435/69.1; 435/196, 435/200, 435/226, 435/254.23, 435/320.1, 536/23.2[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [RWD](#) | [Drawn Desc](#) | [Image](#)**□ 3. Document ID: US 6448083 B1**

L4: Entry 3 of 5

File: USPT

Sep 10, 2002

US-PAT-NO: 6448083

DOCUMENT-IDENTIFIER: US 6448083 B1

**** See image for Certificate of Correction ****

TITLE: Receptor-mediated gene delivery using bacteriophage vectors

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)**□ 4. Document ID: US 5972708 A**

L4: Entry 4 of 5

File: USPT

Oct 26, 1999

US-PAT-NO: 5972708

DOCUMENT-IDENTIFIER: US 5972708 A

TITLE: Plasmid stabilization

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [Claims](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)**□ 5. Document ID: US 20030064437 A1 WO 200240686 A2 AU 200232803 A**

L4: Entry 5 of 5

File: DWPI

Apr 3, 2003

DERWENT-ACC-NO: 2002-508329

DERWENT-WEEK: 200325

COPYRIGHT 2003 DERWENT INFORMATION LTD

TITLE: Producing recombinant proteins e.g., glucocerebrosidase with high-mannose carbohydrate structure, involves continuously culturing cells of Pichia pastoris that comprise DNA molecule encoding protein of interest[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#) | [KMC](#) | [Drawn Desc](#) | [Image](#)[Generate Collection](#)[Print](#)

Terms	Documents
L2 and glucocerebrosidase	5

Display Format: - [Change Format](#)[Previous Page](#) [Next Page](#)

WEST[Generate Collection](#)[Print](#)**Search Results - Record(s) 21 through 27 of 27 returned.****□ 21. Document ID: US 6261810 B1**

L2: Entry 21 of 27

File: USPT

Jul 17, 2001

US-PAT-NO: 6261810

DOCUMENT-IDENTIFIER: US 6261810 B1

TITLE: Enzymatic oxidative deamination process

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)**□ 22. Document ID: US 6258559 B1**

L2: Entry 22 of 27

File: USPT

Jul 10, 2001

US-PAT-NO: 6258559

DOCUMENT-IDENTIFIER: US 6258559 B1

TITLE: Method for producing proteins in transformed Pichia

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)**□ 23. Document ID: US 6153418 A**

L2: Entry 23 of 27

File: USPT

Nov 28, 2000

US-PAT-NO: 6153418

DOCUMENT-IDENTIFIER: US 6153418 A

TITLE: Consensus phytases

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)**□ 24. Document ID: US 6140088 A**

L2: Entry 24 of 27

File: USPT

Oct 31, 2000

US-PAT-NO: 6140088

DOCUMENT-IDENTIFIER: US 6140088 A

TITLE: Stereoselective reductive amination of ketones

[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)

□ 25. Document ID: US 5827684 A

L2: Entry 25 of 27

File: USPT

Oct 27, 1998

US-PAT-NO: 5827684

DOCUMENT-IDENTIFIER: US 5827684 A

**** See image for Certificate of Correction ****TITLE: Production of *Bacillus* entomotoxins in methylotrophic yeast[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)**□ 26. Document ID: US 5330901 A**

L2: Entry 26 of 27

File: USPT

Jul 19, 1994

US-PAT-NO: 5330901

DOCUMENT-IDENTIFIER: US 5330901 A

**** See image for Certificate of Correction ****TITLE: Expression of human serum albumin in *Pichia pastoris*[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)**□ 27. Document ID: EP 438200 A1**

L2: Entry 27 of 27

File: EPAB

Jul 24, 1991

PUB-NO: EP000438200A1

DOCUMENT-IDENTIFIER: EP 438200 A1

TITLE: Method for the expression of heterologous genes in the yeast *Pichia pastoris*, expression vectors and transformed microorganisms.[Full](#) | [Title](#) | [Citation](#) | [Front](#) | [Review](#) | [Classification](#) | [Date](#) | [Reference](#) | [Sequences](#) | [Attachments](#)[KNC](#) | [Draw Desc](#) | [Image](#)[Generate Collection](#)[Print](#)**Terms****Documents**

pastoris with gap

27

Display Format: [Previous Page](#) [Next Page](#)

WEST

 Generate Collection Print

L6: Entry 11 of 30

File: USPT

Mar 20, 2001

US-PAT-NO: 6204012
DOCUMENT-IDENTIFIER: US 6204012 B1

TITLE: Protein production process

DATE-ISSUED: March 20, 2001

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Hellmuth; Karsten	Marklohe			DE
Lopez-Ulibarri; Rual	Montclair	NJ		
Mayer; Anne Fran.cedilla.oise	New York	NY		
Schlieker; Heinrich Winfried	Bloomfield	NJ		
van Loon; Adolphus	Rheinfelden			CH

US-CL-CURRENT: 435/69.1, 435/195, 435/252.3, 435/254.1, 435/255.1, 435/255.5,
435/255.6, 435/320.1, 530/350, 536/23.1, 536/23.2

CLAIMS:

What is claimed is:

1. A method for producing a desired protein which comprises culturing a cell capable of expressing the protein comprising a nucleic acid sequence encoding the desired protein operably linked to a methylotrophic yeast promoter having an activity for an enzyme of the methanol metabolic pathway and controlling expression of the desired protein, in a fermentative batch process comprising a batch phase and a feeding phase under conditions such that dissolved oxygen is continually present in the culture medium throughout the process, and about 1% to about 100% of the total carbon source present in the feeding phase is a repressive sugar or a repressive sugar polymer, which is provided in such an amount that the repressive sugar or repressive sugar polymer is continually depleted by the cell and therefore substantially undetectable in the culture medium; and isolating the protein on completion of the feeding phase by collecting and purifying the desired protein from the culture medium.
2. A method of claim 1 wherein the protein is an enzyme.
3. A method of claim 2 wherein the protein is phytase, cellulase, xylanase, amylase, protease, invertase, lipase, catalase, cellulase, glucose oxidase, alcohol oxidase, pectinase, naringinase, collagenase, peroxidase or pullulanase.
4. A method of claim 1 wherein the cell is a methylotrophic yeast cell.
5. A method of claim 4 wherein the yeast cell is a Hansenula, Pichia, Candida or Torulopsis cell.
6. A method of claim 5 wherein the yeast cell is Hansenula polymorpha or Pichia pastoris.
7. A method of claim 1 wherein the promoter is the formate dehydrogenase promoter, the methanol oxidase promoter or the dihydroxyacetone synthase promoter.

8. A method of claim 1 wherein the cell is eukaryotic host cell which has been engineered to contain the methylotrophic yeast promoter.
9. A method of claim 7 wherein the cell is eukaryotic host cell which has been engineered to contain the methylotrophic yeast promoter.
10. A method of claim 1 wherein the sugar or sugar polymer is a mono-, di-, oligo- or polysaccharide.
11. A method of claim 10 wherein the sugar or sugar polymer is glucose, fructose, sucrose, maltose, starch, glycogen, cellulose or dextrose.
12. A method of claim 11 wherein the sugar is glucose.
13. A method of claim 1 wherein the sugar is in a sugar containing composition which is a natural or artificially produced syrup.
14. A method of claim 13 wherein the sugar containing composition is molasses, glucose syrup, or fructose syrup.
15. A method of claim 14 wherein the sugar containing composition is glucose syrup.
16. A method of claim 1 wherein the sugar or sugar polymer makes up about 40% to about 100% of the carbon source.
17. A method of claim 16 wherein the sugar or sugar polymer makes up about 90% to about 100% of the carbon source.
18. A method of claim 17 wherein the sugar or sugar polymer makes up about 100% of the carbon source.
19. A method of claim 18 wherein the sugar or sugar polymer is glucose.
20. A method of claim 1 wherein the dissolved oxygen is present in the culture medium at a level of from about 1% to about 100% saturation.
21. A method of claim 20 wherein the dissolved oxygen is present in the culture medium at a level of from about 10% to about 100% saturation.
22. A method of claim 21 wherein the dissolved oxygen is present in the culture medium at a level of about 20% saturation.
23. A method of claim 19 wherein the dissolved oxygen is present in the culture medium at a level of about 20% saturation.

WEST

 Generate Collection Print

L6: Entry 11 of 30

File: USPT

Mar 20, 2001

DOCUMENT-IDENTIFIER: US 6204012 B1
TITLE: Protein production process

Detailed Description Text (45):

J. M. Cregg and K. R. Madden (1988): Development of methylotrophic yeast, *Pichia pastoris*, as a host system for the production of foreign proteins, Developments in Industrial Microbiology 29, 33-41

WEST

L2: Entry 22 of 27

File: USPT

Jul 10, 2001

DOCUMENT-IDENTIFIER: US 6258559 B1

TITLE: Method for producing proteins in transformed Pichia

Detailed Description Text (109):

An illustrative glyceraldehyde-3-phosphate dehydrogenase ("GAP") promoter is the Pichia pastoris GAP promoter described by Waterham et al., Gene 186:37 (1997). Saccharomyces GAP promoters are also known to those of skill in the art (see, for example, Horii et al., U.S. Pat. No. 4,945,046; Mukai et al., U.S. Pat. No. 5,021,339; Rosenberg et al., U.S. Pat. No. 5,089,398).